Remarks

The amendment to the claims

Examiner will immediately see that the amendment implements his proposal of 9/19/2005. Independent claim 14 has been amended by moving the limitation "the integrated circuit

5   being constructed on one chip" to the body of the claim and by moving limitations from claims 17 and 22 into the body of claim 14. Claim 17 has been amended to take the amendment of claim 14 into account and claim 22 has been canceled for the same reason.

Patentability of the claims as amended

10   *Patentability of claim 14*

In making the following argument concerning patentability, Applicants are not conceding that Hansen either anticipates claims 14-16 as filed in the Submission or renders them obvious. Applicants are further not conceding that the combination of Hansen and Kolchinsky renders claim 17 obvious or that the combination of Hansen and Yajima renders claim 22 obvious.

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At paragraph 28 of the response of 9/21/05, Examiner indicates that claim 14's "recitation 'constructed on one chip' has not been given patentable weight because the recitation occurs in the preamble". Applicants' amendment of claim 14 has moved the recitation into the body of the claim, where it must be given patentable weight.   Once the recitation

20   "constructed on one chip' is given patentable weight, Hansen cannot be combined with Kolchinsky and Yajima to render the invention of amended claim 14 obvious under 35 U.S.C. 103.   The reason for this is that neither Kolchinsky nor Yajima contain any teaching or suggestion that the apparatus disclosed in those references might be implemented as a component of an integrated circuit that otherwise includes the plurality of data stream inputs

25   and/or outputs and, the plurality of data stream processors set forth in claim 14.

Indeed, the apparatus of neither Kolchinsky nor Yajima is usable in the context of the apparatus of claim 14. Beginning with Kolchinsky, it is apparent from FIG. 1c and FIG. 2c that, to use the terminology of claim 14, Kolchinsky's VPM module is a *single* data stream

30   processor; see in that regard col. 7, line 41-col. 8, line 32. See also FIGs. 3-6, all of which show at 29 that the VPM is coupled to two image buses. Given the pipelined nature of the processing done by the VPM, one of these image busses is the data source and the other is the data sink. There is no teaching in Kolchinsky that the VPM module can be configured either

as more than one data stream processor or to cooperate with other VPMs in processing a single data stream, as required by claim 14 as amended.

Regarding Yajima, claim 14 as amended requires that the context processor be a component

5   that is separate from the data stream processors. This is apparent from the following language of claim 14:

> a context processor that responds to information received from a given data stream processor that is processing a data stream to produce information about the given data stream's context and provide the context information to the given
10   data stream processor; the given data stream processor using the context information to process the data stream.

In Yajima, the elements that are functionally most similar to the data stream processors are the arithmetic encoders 10 and decoders 22. In his rejection, Examiner cites the description

15   of the context generator at col. 5, lines 42-49. The component of Yajima's system which implements the context generator is delay unit 40 in FIG. 5, as is apparent from the discussion of FIG. 5 at col. 15, lines 8-18. FIG. 5 is a detailed block diagram of an arithmetic encoder 10, and consequently, delay unit 40 is not separate from the "data stream processor" as required by Applicants' claim 14, but rather a component of it. Further, as is clear from

20   FIG. 5, the only information received in delay unit 40 is the data stream itself, not "information received from a given data stream processor", as required by the claim.

The dependent claims

The dependent claims are all of course patentable because claim 14 is patentable. Certain of

25   the dependent claims are, however, patentable in their own rights over the references.

Beginning with claim 15, Applicants respectfully point out that the added limitation is a "general-purpose microprocessor *that has an industry-standard architecture*", which the processor of Hansen, with all of its specialized operations, clearly does not have. As pointed

30   out in the claim, the fact that the processor's architecture is industry-standard means that standard tools are available for program development.

As regards claim 17, as indicated above, what is disclosed in Kolchinsky must be understood as a *single* data stream processor; it therefore cannot disclose the claim's "configurable

interconnections between the aggregated data stream processors" or the other limitations of claim 17.

As regards claim 18, what Murata discloses is a bit map that determines how a job is

5   processed among clusters of processors; what is claimed is apparatus for configuring a data stream input or output that includes a plurality of I/O pins, a configuration specifier, and configuration circuitry that configures the data stream input and/or output as specified by the configuration specifier. Given the difference in scale and purpose between configuring which processors in a cluster are to receive data and what pins are to be used, Applicant's

10   attorney does not see the relevance of Murata.

As regards claim 23, Deb's system in which a descriptor that is stored with the packet may on occasion be provided to the host independently of the packet simply cannot be taken to render a system obvious in which packets and descriptors are stored separately and the manipulation

15   of descriptors instead of packets is fundamental to the architecture of the system.

Conclusion

Applicants have accepted Examiner's proposed amendment of 9/19/05 in order to obtain rapid issuance of a patent, but have not conceded the correctness of Examiner's rejections

20   and retain the right to file a divisional containing the claims as filed in the RCE. Applicants have further shown how the claims as amended are patentable over the references cited by Examiner and have thus been fully responsive to the Office action of 9/21/2005. No fees are believed to be required by way of this amendment. Should any be, please charge them to deposit account number 501315.

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